

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of managing spatially related defects on a data storage media surface in a data storage device comprising:
 - identifying defect locations on the media surface;
 - determining whether the location of an identified defect is within a predetermined window defined relative to ~~of~~ another identified defect location on the media surface;
 - if the location is within the predetermined window, characterizing the defects in the window as a scratch; and
 - generating a scratch tracking table having a start index and an end index for each scratch.
2. (Original) The method according to claim 1 further comprising padding the scratch.
3. (Original) The method according to claim 1 wherein the characterizing operation comprises:
 - assigning a unique scratch index to the scratch;
 - and associating each defect within the window with the unique scratch index.
4. (Original) The method according to claim 3 further comprising:
 - generating a scratch index table associating each identified defect with a scratch index.
5. (Original) The method according to claim 1 wherein the determining operation comprises:
 - loading an identified defect location in a register; and
 - comparing the defect location and a last identified defect location of each identified scratch against predetermined window criteria.
6. (Original) The method according to claim 7 wherein the predetermined window criteria comprises a number of cylinders and a number of bytes.

7. (Currently Amended) A method comprising:
identifying defect locations on a data storage media;
tabulating the identified defects in a defect list;
determining whether one or more defect locations lies within a predetermined window ~~of~~
defined relative to another defect location;
assigning a unique scratch index to each defect location within the predetermined
window;
generating a scratch tracking table listing a start index for a first defect location in the
window and an end index for a last defect location in the window for each scratch index
assigned; and
generating a scratch index table associating a scratch index with each defect location.
8. (Original) The method according to claim 7 further comprising:
using the scratch tracking table and the scratch index table to determine whether a read or
write command is to be redirected to another data storage media location.
9. (Original) The method according to claim 7 further comprising:
retrieving an entry in the scratch tracking-table having a first scratch index;
searching the scratch index table for defect locations associated with the first scratch
index;
padding the scratch; and
repeating the retrieving, searching and padding operations for a next scratch index.
10. (Original) The method according to claim 9 wherein the repeating operation includes
a query operation asking whether an end of the scratch tracking table has been reached prior to
retrieving the next scratch index.
11. (Currently Amended) A system for managing scratches on a data storage media in a
data storage device comprising:
a controller adapted to control access by a host to and from the data storage media,
wherein the controller
identifies defect locations on the media surface.

determines whether the location of an identified defect is within a predetermined window defined relative to another identified defect location on the media surface, and characterizes the defects in the window as a scratch, if the location is within the predetermined window;

a memory coupled to the controller;

a scratch index table in the memory having a unique index entry for each identified defect location on the data storage media and an associated scratch index entry for each defect location; and;

a scratch tracking table in the memory having, for each scratch index entry, a start index, and end index, and an end defect location for each identified scratch index.

12. (Original) The system according to claim 11 further comprising a buffer in the controller wherein the scratch tracking table and scratch index table are utilized in the buffer to identify defect locations.

13. (Currently Amended) The system according to claim 11, wherein the controller ~~identifies defect locations on the media surface, determines whether the location of an identified defect is within a predetermined window of another identified defect location on the media surface, characterizes the defects in the window as a scratch, if the location is within the predetermined window, and~~ generates a scratch tracking table having a start index and an end index for each scratch.

14. (Previously presented) The system according to claim 13, wherein the controller pads each scratch in the scratch tracking table.

15. (Previously presented) The system according to claim 13 wherein the controller characterizes the defects by:

assigning a unique scratch index to the scratch, and

associating each defect within the window with the unique scratch index.

16-20. (Cancelled)

21. (Currently Amended) A method, comprising:
characterizing defects in a medium as belonging to one or more scratches in the medium using a scratch index table, wherein a scratch includes one or more defects within a predetermined window defined relative to another identified defect.
22. (Previously presented) The method according to claim 21, wherein the scratch index table associates each of the defects with one or more scratches in the medium.
23. (Cancelled)
24. (Previously presented) The method according to claim 21, wherein the medium is a disc drive.
25. (Previously presented) The method according to claim 1 wherein the predetermined window criteria comprises a number of cylinders and a number of bytes.